CLAIMS

What is claimed is:

1. A method for using a computer to emulate a remote console for connection to a target device, wherein the computer has an output screen and wherein the target device has a serial port and a target device platform, the method which comprises the steps of:

(a) opening a connection through a wire to the serial port on the target device;

(b) automatically recognizing the target device platform;

(c) building menus, drop-down lists, or shortcuts according to the target device;

(d) entering commands on the computer;

(e) entering commands on the computer via the menus or the shortcuts;

(f) sending commands to the target device via the serial port;

(g) receiving output from the target device;

(h) displaying the output on the output screen; and

(i) running an instant messaging client in parallel;

wherein the target device does not distinguish the computer from a remote console.

2 The method of Claim 1 wherein the target device is a server.

3. The method of Claim 1 wherein the target device comprises a command line interface port.

4. The method of Claim 1 wherein the target device is an embedded system.

5. The method of Claim 1 wherein the computer is a handheld computer.

6. The method of Claim 1 wherein the commands are in ASCII format and the output is in ASCII format.

7. The method of Claim 1 wherein the remote console is a full function terminal and wherein the commands in ANSI format and the output is in ANSI format.

8. The method of Claim 7 wherein the target device comprises a command line interface port and the command line interface is selected from the group consisting of DOS prompt, korn shell, sh, bash, tcsh, prom monitor, VT100.

9. The method of Claim 7 which further comprises the step of enabling full functioning of standard terminal editors such as vi and emacs.

10. A computer for emulating a remote console for connection to a target device, wherein the target device has a serial port and a target device platform, the computer comprising

an output screen;

a connector capable of connecting through a wire to the serial port on the target device;

menus, drop-down lists, or shortcuts according to the target device; and

an instant messaging client;

wherein the computer is capable of: automatically recognizing the target device platform; receiving entered commands; receiving entered commands via the menus or the shortcuts; sending commands to the target device via the serial port; receiving output from the target device; displaying the output on the output screen; running the instant messaging client in parallel; and

wherein the target device is not capable of distinguishing the computer from the remote console.

11 The computer of Claim 10 wherein the target device is a server.

12. The computer of Claim 10 wherein the target device comprises a command line interface port.

13. The computer of Claim 10 wherein the target device is an embedded system.

14. The computer of Claim 13 wherein the embedded system is a vending machine, an automobile, medical equipment, a cable box, a security system, a home monitoring system, an entertainment equipment, or a home appliance.

15. The computer of Claim 10 wherein the commands are in ASCII format and the output is in ASCII format.

16. The computer of Claim 10 wherein the remote console is a full function terminal and wherein the commands are in ANSI format and the output is in ANSI format.

17. The computer of Claim 10 which further comprises a full functioning of standard terminal editor such as vi and emacs.

18. A method for using a computer to emulate a remote console for connection via a server to a target device, wherein the computer has an output screen and a wireless modem and wherein the target device has a serial port and a target device platform, the method which comprises the steps of:

(a) opening a virtual socket to the server through the wireless modem;

(b) opening a connection between the server and the target device;

(c) automatically recognizing the target device platform;

(d) building menus, drop-down lists, or shortcuts according to the target device;

(e) entering commands on the computer;

(f) entering commands on the computer via the menus or the shortcuts;

(g) transporting the commands to the target device via virtual socket and the server;

(h) receiving output from the device via the virtual socket and the server;

(i) displaying the output on the screen of the computer; and

(j) running an instant messaging client in parallel;

wherein the target device does not distinguish the computer from a remote console.

19. The method of Claim 18 wherein Step (b) uses a telnet, secured shell ssh, ssh2, or ssh3, or file transfer protocol.

20. The method of Claim 18 wherein the computer is part of a virtual private network.

21. The method of Claim 18 wherein the commands are Unix, OS, or prom monitor commands.

22. A computer for emulating a remote console for connection via a server to a target device, wherein the target device has a serial port and a target device platform, the computer comprising

an output screen;

a wireless modem;

a connector capable of opening a virtual socket to the server through the wireless modem and allowing a connection between the server and the target device;

menus, drop-down lists, or shortcuts according to the target device; and

an instant messaging client;

wherein the computer is capable of: automatically recognizing the target device platform; receiving entered commands; receiving entered commands via the menus or the shortcuts; sending commands to the target device via virtual socket and the server; receiving output from the target device via the virtual socket and the server; displaying the output on the output screen; running the instant messaging client in parallel; and

wherein the target device is not capable of distinguishing the computer from the remote console.

23. The computer of Claim 22 the target device comprises a hub, a router, a switch, a bridge, a repeater, a gateway, a firewall, interactive television hardware, a manufacturing hardware, a robotics, or an animatronics.

24. The computer of Claim 22 wherein the computer is a handheld computer.

25. A method of providing a server system capable of connecting to computer emulating remote consoles for connection to target devices, the method which comprises the steps of:

(a) hosting a database of settings, wherein settings comprises alarm thresholds and preferences regarding monitoring, connection, or messaging;

(b) providing each connected computer with a user interface to modify settings;

(c) enforcing security on all activities by passwords, certificates, or hardware identification;

(d) pinging any targeted device;

(e) monitoring all targeted devices according to a specification or service level agreement;

(f) monitoring network congestion;

(g) providing an instant update on all monitored systems and/or network congestion upon request;

(h) firing alarms when a parameter reaches an adjustable threshold;

(i) diagnosing target device problems and inefficiencies;

(j) hosting interactive troubleshooting programs along with Frequently Asked Questions and Online Help applications; and

(k) running an instant messaging server in parallel to other processes;

wherein the server is capable of maintaining and initiating multiple connections.

26. The method of Claim 25 wherein the computers are emulating different types of remote consoles and the system can process in parallel.